## REMARKS/ARGUMENTS

Claims 50-94 are pending in the application. In the Office Action, the following rejections and allowances were stated:

- Claims 64-84 were rejected under 35 U.S.C. §101 as claiming the same invention as United States Patent No. 6,527,798;
- Claims 64-84 were rejected under the doctrine of obviousness type double patenting over claims 1-73 of United States Patent No. 6,497,421;
- Claims 50-63 were rejected under the doctrine of obviousness type double patenting over claims 1-73 of United States Patent No. 6,497,421 in view of United States Patent No. 5,486,028;
- Claims 88-94 were rejected under the doctrine of obviousness type double patenting over claims 1-73 of United States Patent No. 6,497,421 in view of United States Patent No. 5,755,755;
- Claims 64-84 were rejected under the doctrine of obviousness type double patenting over claims 1-18 of United States Patent No. 6,620,188;
- Claims 50-63 were rejected under the doctrine of obviousness type double patenting over claims 1-18 of United States Patent No. 6,620,188 in view of United States Patent No. 5,486,028;
- Claims 88-94 were rejected under the doctrine of obviousness type double patenting over claims 1-68 of United States Patent No. 6,635,076 in view of United States Patent No. 5,486,028;
- Claims 50-57 and 63 were rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,624,392;
- Claims 58, 59, 61 and 63 were rejected under 35 U.S.C. 103(a) as being obvious over United States Patent No. 5,624,392;

- Claims 88-92 were rejected under 35 U.S.C. 103(a) as being obvious over United States Patent No. 5,624,392 in view of United States Patent No. 5,755,755;
- Claims 63-87 were deemed to be allowable if the obviousness type double patenting rejections were overcome; and
- Claims 93 and 94 were deemed allowable if rewritten to to overcome the § 112 rejection\* and to include all of the limitations of the base claim and any intervening claims. (\*Applicant notes that no § 112 rejection appears to have been stated in the Office Action).

By the present amendment, independent claim 50 has been amended to remove recitation of the "fin" limitation and to recite that the heat exchanger comprises a generally helical balloon or a balloon having at least one generally helical lobe through which heat exchange fluid may circulate. Support for this amendment is found in the originally filed specification including but not necessarily limited to Figure 20 and page 63, line 16 through page 65, line 14. In view of this limitation in claim 50 and possibly for other reasons not specifically articulated here, the subject matter of claim 50 is believed to be novel and unobvious over all of the prior art of record. No prior art of record describes or suggests a heat exchange catheter device having the combination of limitations reited in claim 50, including a heat exchanger that comprises a generally helical balloon or a balloon having at least one generally helical lobe.

Dependent claims 51-63 further limit or add to the subject matter of independent claim 50 and, thus, the subject matter of all such dependent claims is also believed to be novel and unobvious over the prior art of record for the reasons stated above with respect to claim 50.

Terminal disclaimers are submitted herewith with respect to United States Patent Nos. 6,497,421 and 6,620,188, thereby overcoming the stated obviousness type double patenting rejections of claims 64-84. With respect to the stated statutory double patenting rejection of claims 64-84 over United States Patent No. 6,527,798, independent claim 64 has been amended to recite that the heat

exchanger comprises at least one generally helical flow path through which a heat exchange fluid may circulate. This amendment is supported by the same portions of the specification that support the amendment to claim 50. By this amendment, the scope of claim 64 has been altered and the statutory double patenting rejection has been overcome. Thus, based on the allowability stated in the Office Action, claims 64-84 are now believed to be in condition for allowance.

Also, by the present amendment, claims 85-87 have been cancelled.

Also, by the present amendment, amendments have been made to independent claim 88 to clarify the language of such claim and to specify that the heat exchanger comprises a generally helical balloon or a balloon having at least one generally helical lobe. This limitation on claim 88 is supported by the same portions of the specification as referenced above with respect to the amendment of claim 50. As amended, claim 88 is believed to be to be novel and unobvious over all prior art of record as no prior art is seen to describe or suggest a heat exchange catheter system having the limitations recited in claim 88, including the limitation of a heat exchanger that comprises a generally helical balloon or a balloon having at least one generally helical lobe.

Dependent claims 89-94 further limit or add to the subject matter of independent claim 88 and, thus, the subject matter of all such dependent claims is also believed to be novel and unobvious over the prior art of record for the reasons stated above with respect to claim 88.

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Accordingly, all stated grounds for rejection are believed to have been overcome and claims 50-84 and 88-94 are now believed to be in condition for allowance. Issuance of a Notice of Allowance is requested.

Respectfully submitted,

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## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment; Commissioner for Patents, P.O. Box 1450, Alexandria, VA 2313-1450, on November 17, 2004

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